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United States Patent [19]

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[11] Patent Number: 5,872,516

[45] Date of Patent: Feb. 16, 1999

[54] **ULTRASONIC TRANSCEIVER AND REMOTE CONTROLLED DEVICES FOR PETS**

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[21] Appl. No.: 199,614

[22] Filed: Feb. 22, 1994

[51] Int. Cl.[6] G08B 23/00

[52] U.S. Cl. 340/573; 340/541; 340/552; 367/6; 367/93; 119/719; 119/720

[58] Field of Search 340/573, 571, 340/541, 552; 367/93, 6; 119/719, 720

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[57] ABSTRACT

An ultrasonic transceiver device and remote output devices controlled by the transceiver for use by domestic pets. The transceiver utilizes a fixed interval edge detect modulation system to lock out stray environmental noise thereby, avoiding false triggering and greatly increasing the working range. Output devices include: a wireless pet containment system in which ultrasonic transmitters are mounted on a series of posts defining the perimeter of the containment area and a receiver device adapted to be worn by a domestic animal. Upon receiving the transmitted ultrasound the receiver device sounds a warning tone followed by an electric shock to train the animal to stay within the perimeter; a sonic alarm system to deter a domestic animal from entering a restricted area whereby, an ultrasonic transmitter is worn by the animal and a receiver with an alarm output is placed in a stationary location to sound an alarm chasing the animal from the area in which the receiver is placed; a remote pet training device whereby a hand held transmitter is carried by a human trainer and a receiver unit is worn by the pet, the receiver produces a set of training tones in response to the modulated ultrasound produced by the transmitter; and a remotely operated pet door which automatically opens under its own power when it receives a signal from an ultrasonic transmitter worn by a pet.

20 Claims, 12 Drawing Sheets